Assessment Delivery System (ADS) Platform Technical Specifications for the Illinois Science Assessment (ISA)

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Secure Testing Requirements

In order to deliver student tests, all testing devices will be required to have the correct version of the Safe Exam Browser (SEB) deployed. Please follow the instructions found on the ISBE ISA site for additional download information.

Frontend Specifications

(For Desktops/Laptops/ Tablets)

These system specifications are for recommended devices, browsers, and operating systems considerations. The system has been tested against these specifications and any reported issue resolved accordingly. However, the system may fully function or partially function with non-specified devices, browsers, and operating systems.

Workstations

These are the recommended specifications for a test-taker workstation.

PC Processors

- Pentium Intel Core +
- 2.4 GHz or better (may be slightly reduced for Mac users)

RAM

- 512 MB or better is required by the ADS Platform.
- Note: Many of the Supported Operating Systems require 2 GB or higher RAM

PC Operating System(s)

- Windows 7, Windows 8.1. Windows 10

Mac Operating System(s)

- Mac OSX 10.9 or better; Mac OS 10.11 or better recommended

Chromebook

- Chrome OS 46 or better

iPad

- OS 10.0 or better

Linux

- Fedora 22, Ubuntu 12.04, Ubuntu 14.04

Screen Resolution

A minimum screen resolution of 1366 X 768 or higher is recommended

Target browsers

Auto-update is recommended for Chrome and Firefox browsers. Edge has not been tested yet.

Windows OS	IE11+	Chrome	Firefox
Win 7 Minimum	Yes	46+	42+
Win 8.1 Recommended	Yes	46+	42+
Win 10 Recommended	Yes	46+	42+

Mac OSX	Safari 9.3+	Safari 10.0+	Chrome	Firefox
10.9 Minimum	Yes	n/a	46+	42+
10.10 Minimum	No	Yes	46+	42+
10.11 Recommended	No	Yes	46+	42+
10.12 Recommended	No	Yes	46+	42+

Linux Distributions	Chrome	Firefox
Fedora 22 Recommended	46+	42+
Ubuntu 12.04 Minimum	46+	42+
Ubuntu 14.04 Recommended	46+	42+

Chrome OS	Chrome
46+	46+

Note: Chromebooks or Chromeboxes

iPad OS
10.0+

Browser Specifications

Cookies, JavaScript, Images enabled

Screen Size

9.5 inch screen or better

Color Depth

High Color, 16 Bit

Input Devices

Wired or wireless keyboard w/ mouse or touchpad

Audio

Earbuds, headphones are required for assessments should they contain audio

Disk Space

100MB free space

Frameworks/3rd party app components

None.

Touch Screen Compatibility

Not officially supported. However, the system may fully or partially function with touch screen capabilities

Tablets

These are the specifications targeted for a user of the system's own mobile device.

Platform

In scope	Version
Apple iOS	10.0+
Android	Not Supported
Windows	8.1

Screen resolution

No specification defined; can vary greatly between hardware. It is recommended that a tablets have a 9.5 inch or larger screen. Devices will smaller screen resolution will be subject to scrolling.

Infrastructure Specifications

Bandwidth

The following table identifies the requirements for Internet connectivity to conduct an ISA assessment:

Minimum*	Recommended*
250 kb/sec/student	300kb/sec/student

Connectivity to the Internet is required to start, take, and complete the assessment. Constant internet connectivity is required at the minimum bandwidth. Additionally, today, the item content of the entire test JSON is downloaded into memory when the test starts. Images are not downloaded until the related question is reached during the test. If a student is disconnected in the middle of test session, he or she can still navigate between items and view the items, but there's a chance they will not see the images.

*NOTE: Performance and bandwidth research is currently underway to determine actual minimums and recommendations.

Firewalls, Content and Spam filters

Firewalls, content and spam filters must be set to allow access to ADS platform domains.

The following must be opened in any firewalls, proxy servers, or software that is used for internet content filtering:

- *.ileducates.org
- https://fonts.googleapis.com
- https://fonts.gstatic.com
- https://js-agent.newrelic.com
- https://bam.nr-data.net
- https://teach-isa.ileducates.org
- https://isbe-tap.s3.amazonaws.com
- https://sec2.isbe.net
- https://d1f98qdoo4q7za.cloudfront.net
- https://d1vid1glmd31ix.cloudfront.net
- https://breaktechisbetoolbar.speechstream.net/
- https://breaktechisbecache.speechstream.net/
- https://breaktechisbeservices.speechstream.net/
- http://breaktechisbeservicesbackup.speechstream.net/
- https://speechstreamtoolbar.speechstream.net/
- https://speechstreamtoolbar-webservices.texthelp.com/
- https://speechstreamservicesbackup.speechstream.net/

Minimum Testing Station Specifications

If testing on **Windows Desktop/Laptop** devices:

Item	Minimum	Recommended	Notes
PC Processor	Pentium Intel Core + 2.4 GHZ or better		
RAM	2GB min	4 GB	The ADS requires up to 512MB
PC Operating Systems	Windows 7, Windows 8, Windows 8.1	Windows 7, Windows 8.1, Windows 10	
Screen Resolution	1366 x 768		1366 X 768 minimum resolution
Browsers	IE11, Chrome 46+, Firefox 42+	Chrome 46+, Firefox 42+	

If testing on **Windows Tablet** devices:

Item	Minimum	Recommended	Notes
PC Processor	Intel Core i5 or better		
RAM	2GB min	4 GB	The ADS requires up to 512MB
PC Operating Systems	Windows 7, Windows 8.1, Windows 10		
Screen Size recommendation	9.5”		
Browsers	IE11, Chrome 46+, Firefox 42+		

If testing on **Mac Desktop/Laptop** (not tablets) devices:

Item	Minimum	Recommended	Notes
Processor	Intel CPU		
RAM	2GB	4 GB	The ADS requires up to 512MB
Operating Systems	Mac OSX 10.9	Mac OS 10.11+	
Screen Size	1366 X 768 minimum resolution		
Browsers	Chrome 46+, Firefox 42+		

If testing on **Linux Desktop/Laptop** (not tablets) devices:

Item	Minimum	Recommended	Notes
Processor	Pentium Intel Core + 2.4 GHZ or better		
RAM	2GB	4 GB	The ADS requires up to 512MB
Operating Systems	Fedora 22, Ubuntu 12.04, Ubuntu 14.04		
Screen Size	1366 X 768 minimum resolution		
Browsers	Chrome 46+, Firefox 42+		

If testing on **Chromebook/Chromebox** devices:

Item	Minimum	Recommended	Notes
Processor	Any	Any	
RAM	2GB	4 GB	The ADS requires up to 512MB
Operating Systems	OS46		As a best practice, the test will run on the most recent three versions of the Chromebook OS.
Screen Size	9.5”		1366 X 768 minimum resolution
Browsers	Chrome 46+,		

If testing on **iPad** devices:

Item	**Notes**
Operating Systems	iOS 10.0 or higher
Supported Versions	• iPad Pro 12.9 inch • iPad Pro 9.7 inch • iPad Air 2 • iPad Air • iPad 4th generation
Screen Size	9.5”